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Dated: June 10, 2005

Signature:

(Lawrence E. Russ)

Docket No.: EMCORE 3.0-081
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Guo et al.

Application No.: 10/721,488

Group Art Unit: 2826

Filed: November 25, 2003

Examiner: M. L. Tran

For: GALLIUM NITRIDE-BASED DEVICES AND
MANUFACTURING PROCESS

RESPONSE TO RESTRICTION REQUIREMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

This communication is in response to the Office Action mailed May 23, 2005 setting forth a Restriction Requirement in the above-identified application.

In the Office Action, the Examiner required restriction to one of the following inventions under 35 U.S.C. § 121:

I. Claims 1-33 and 68-80, drawn to a semiconductor device.

II. Claims 34-67 and 81-92, drawn to a method of manufacturing a semiconductor device.

In response, Applicants elect the invention of Group I, corresponding to claims 1-33 and 68-80, without traverse. Applicants reserve the right to file a divisional application corresponding to the non-elected claims.

The Examiner also contends that the claims of Group I are directed to three patentably distinct device species:

1) A semiconductor structure comprising a buffer region including first and second superlattices and the nucleation layer, shown in FIG. 1.

2) A semiconductor structure comprising a buffer region including a superlattice and nucleation layers that sandwich the superlattice, shown in FIG. 5.

3) A Schottky diode comprising a buffer region, shown in FIGS. 6 and 7.

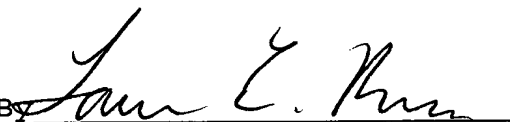
The Examiner has required election of one of the above species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

Applicants elect species 1, namely, the embodiment shown in FIG. 1, without traverse for prosecution on the merits. Claims 1, 8-9 and 19-20 are generic to all species. Further, claims 2-27 and 21-24 are readable at least on species 1. Therefore, claims 1-9 and 19-24 are readable on the elected species. Applicants reserve the right to file a divisional application with claims readable on the non-elected species.

In the event any fee is due in connection with the present response, the Examiner is authorized to charge Applicant's Deposit Account No. 12-1095 therefor.

Dated: June 10, 2005

Respectfully submitted,


By Lawrence E. Russ

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